

CLAIM AMENDMENTS

Claim 1 (original). An optical waveplate comprising polyethylene naphthalate.

Claim 2 (currently amended). The optical waveplate of claim 1 in the form of a film with a thickness in the range of 2 μm to about 25 μm .

Claim 3 (original). The optical waveplate of claim 2 wherein the film is an uniaxially stretched film.

Claim 4 (original). The optical waveplate of claim 2 wherein the film is a biaxially stretched film.

Claim 5 (original). An optical device comprising

at least an optical waveguide having each at least two sections, and
a polyethylene naphthalate optical waveplate optically coupled between two sections of the waveguide to transmit a light signal between said two sections of the waveguide.

Claim 6 (currently amended). The optical device of claim [4] 5 wherein the waveplate has a thickness in the range of 2 μm to about 25 μm .

Claim 7 (currently amended). The optical device of claim [4] 5 wherein the waveguide defines an optical axis and the waveplate is disposed at an angle in the range 80-88° to the optical axis of the waveguide.

Claim 8 (currently amended). The optical device of claim [4] 5 wherein the waveguide is an arrayed waveguide grating.

Claim 9 (currently amended). The An optical device comprising

a wafer,
a plurality of waveguides extending across the wafer,
a slot extending across the waveguides, and
a polyethylene naphthalate optical waveplate disposed in the slot and extending therealong so as to optically modify optical signals passing through the waveguides.